

In the claims:

Claims 1-15 cancelled.

16. (new) A device for detecting a condition of a tire on a wheel of a vehicle; comprising a receiving unit adapted to be provided in a vehicle; at least one sensor which ascertains condition data of the tire and outputs them to said receiving unit; an evaluation device, said at least one sensor being adapted to be provided in the vehicle and configured to ascertain values representing a distance to at least one target element affixed to the tire and output them to said evaluation device which from that ascertains condition data of the tire, wherein said at least one target element includes a first target adapted to be affixed to one side of the tire and a further target which is a rotating reference measurement target on the wheel.

17. (new) A device as defined in claim 16, wherein said further target is a travel surface, and a height of said at least one sensor above the travel surface is ascertained as the distance.

18. (new) A device as defined in claim 16, wherein said at least one sensor is configured to ascertain speed values of said at least one target element.

19. (new) A device as defined in claim 16, wherein said evaluation unit is configured so that from the values selected from the group consisting of a distance values, speed values, and both, said evaluation unit ascertains variables which are compared with rated values; and further comprising a memory unit which stores the rated values.

20. (new) A device as defined in claim 19, wherein said evaluation unit is configured so that it ascertains amplitudes of the distance, maximums of which amplitudes are compared with rotated values stored in memory.

21. (new) A device as defined in claim 16, wherein said at least one sensor is adapted to be located in static fashion on a vehicle chassis.

22. (new) A device as defined in claim 16, wherein said at least one first sensor is adapted to be located on a component that is connected dynamically to a vehicle chassis.

23. (new) A device as defined in claim 22, wherein said at least one sensor is adapted to be located on a strut that is connected dynamically to a vehicle chassis.

24. (new) A device as defined in claim 16, wherein said at least one sensor is a sensor selected from the group consisting of an electromagnetic sensor, an optical sensor, and an acoustic sensor.

25. (new) A device as defined in claim 24, wherein said electromagnetic sensor is configured as a radar sensor.

26. (new) A device as defined in claim 24, wherein said optical sensor is a sensor selected from the group consisting of a lidar sensor and a picture-taking device.

27. (new) A device as defined in claim 24, wherein said acoustic sensor is configured as an ultrasound sensor.

28. (new) A device as defined in claim 16, wherein said at least one sensor is configured to ascertain the condition data of the tire selected from the group consisting of tire pressure condition, tire load condition, rod, tire tread condition, summer tire condition, winter tire condition, and tire imbalance condition.

29. (new) A device as defined in claim 16, wherein said at least one sensor is configured to ascertain condition data of the tire which is a rim condition.

30. (new) A device as defined in claim 16, wherein said evaluation device is configured so as to make condition data of the tire available to an element selected from the group consisting of a network having control/regulating systems connected to it, at least one display device of the vehicle, and both.

31. (New) A device as defined in claim 16, wherein the device for detecting a condition of a tire on a wheel of a vehicle is configured as a device for detecting a condition of a tire on a wheel of a motor vehicle.

32. (New) A device as defined in claim 16, wherein the device for detecting a condition of a tire on a wheel of a vehicle is configured as a device for detecting a condition of a tire on a wheel of an aircraft.